

FIVE NEW SPECIES OF MIRIDAE (HEMIPTERA).¹

BY H. G. JOHNSTON, College Station, Texas.

Orthotylus robiniae n. sp.

Allied to *ramus* Knight but differs in the shorter rostrum, and in the structure of the male genital claspers.

Male. Length 3.6 mm., width 1.3 mm. Head: width .71 mm., vertex .37 mm. Antennae: segment I, length .26 mm.; II, 1.0 mm.; III, .63 mm.; IV, .37 mm.; yellowish green, segments III and IV dusky. Rostrum, length .86 mm., slightly surpassing hind margin of mesosternum; yellowish green, apex black. Pronotum: length .54 mm., width at base 1.09 mm.

Uniformly green or yellowish green, membrane uniformly pale fuscous. Clothed with simple, pale yellowish pubescence. Genital characters distinctive, left clasper with dorsal and ventral arms nearly extending in same plane, dorsal arm curving inward along margin of genital segment to near the dorsal surface, gradually flattened forming a thin spatulate apex furnished with several short, blunt teeth, ventral arm acuminate, following margin of genital segment to beyond middle then curving inward and upward forming an elongate "S"; right clasper inwardly curved, with blade-shaped arm at base curving upward and inward, forked near apex forming two short, flattened, acuminate arms curving inward and upward to near middle of genital segment their apices flattened and with short, blunt teeth; dorsal margin of genital segment with slender chitinous spine projecting posteriorly.

Female. Length 3.5 mm., width 1.4 mm. Head: width .71 mm., vertex .37 mm. Antennae: segment I, length .25 mm.; II, .92 mm.; III, .63 mm.; IV, .42 mm. Pronotum: length .54 mm., width at base 1.09 mm. Very similar to male in size, form, pubescence and coloration.

Holotype: male May 15, 1931, Natchez, Mississippi (H. G. Johnston); author's collection.

Allotype: taken with the type.

Paratypes: 16 males and females taken with the types on locust (*Robinia pseudo-acacia*), which is no doubt the host plant.

¹ Contribution from Entomology Department, Texas A. & M. College, College Station, Texas.

Plagiognathus reinhardi n. sp.

Related to *delicatus* Uhler but distinguished by longer second antennal segment and bright red color.

Male. Length 3.1 mm., width 1.1 mm. Head: width .65 mm., vertex .29 mm.; pale reddish brown, tylus fuscous. Rostrum, length .92 mm., reaching apex of intermediate coxae. Antennae: segment I, length .21 mm., dark brown to black, pale at apex; II, .96 mm., yellowish brown, blackish at base; III, .63 mm.; IV, .29 mm. Pronotum: length .50 mm., width at base .96 mm.

Coloration bright red to dark red; head, except tylus, and anterior portion of pronotum paler, cuneus at base and narrowly on outer margin pale translucent, membrane black, tinged with red, veins red. Venter, sterna, and pleura reddish brown to fuscous. Legs pale; femora with three rows of brown spots on lateral aspect; tibial spines black with black spot at base of each, but becoming obsolete apically; apex of tarsi black. Clothed with simple, golden yellow pubescence.

Female. Length 3.4 mm., width 1.2 mm. Head: width .67 mm., vertex .33 mm. Antennae: segment I, length .21 mm., black, pale at apex; II, .92 mm., yellowish, black at base; III, .58 mm.; IV, .25 mm. Pronotum: length .58 mm., width at base 1.1 mm. Coloration and pubescence very similar to the male.

Holotype: male, April 3, 1933, College Station, Texas (H. G. Johnston); author's collection.

Allotype: taken with the type.

Paratypes: 63 males and females taken with the types on *Craetagus* sp., where the species was breeding. 13 males and females April 1, 1 female March 29, 1 male April 3, 1 female April 21, 1933, College Station, Texas (H. J. Reinhard).

The writer is pleased to name this beautiful little species for Mr. H. J. Reinhard, who is well known for his work on Tachinidae, and who was the first to locate this species.

Sthenarus viticola n. sp.

Distinguished by small size, pale yellowish to brownish color, and an abundance of coarse yellowish to golden, simple pubescence.

Male. Length 2.5 mm., width 1.1 mm. Head: width .56 mm., vertex .29 mm. Antennae: segment I, length .14 mm.; II, .73 mm.; about equal in thickness to segment I although

more slender near base; III, .33 mm.; IV, .25 mm.; uniformly pale yellowish brown; clothed with fine yellowish pubescence. Rostrum: length .71 mm., reaching posterior margin of intermediate coxae, yellow, apex brown. Pronotum: length .42 mm., width at base .96 mm.

Clothed with simple, coarse, yellowish to golden pubescence; uniformly pale yellowish to brownish above and below; membrane dusky, veins sometimes paler.

Female. Length 2.6 mm., width 1.1 mm. Head: width .56 mm., vertex .32 mm. Antennae: segment I, length .13 mm.; II, .58 mm., scarcely equal in thickness to segment I, much thinner on basal half; III, .31 mm.; IV, .25 mm. Pronotum: length .42 mm., width at base .92 mm. Coloration usually a paler yellowish brown than the male, pubescence very similar.

Holotype: male, May 25, 1931, Corinth, Miss. (H. G. Johnston); author's collection.

Allotype: taken with the type.

Paratypes: 10 males and females taken with the types on wild grape (*Vitis* sp.). 6 males and females May 15, 1931, Natchez, Miss. (H. G. Johnston), also on wild grape.

***Neoborus osmanthicola* n. sp.**

The coloration suggestive of *canadensis* V. D., but differs in the broadly pale margins of scutellum, nearly glabrous surface of the dorsum, the less prominent eyes and shorter rostrum.

Male. Length 4.6 mm., width 1.9 mm. Head: width 1.01 mm., vertex .42 mm.; vertex and frons sharply declivent; yellowish, tylus brownish black with few scattered, yellowish hairs. Rostrum, length 1.09 mm., scarcely attaining the posterior margin of mesosternum, yellowish, apex black. Antennae: segment I, length .54 mm., brownish black, nearly glabrous; II, 1.36 mm., yellowish brown becoming brownish black basally; III, .52 mm., fuscous; IV, .33 mm., fuscous. Pronotum: length .88 mm., width at base 1.56 mm., lateral margins straight, but scarcely carinate.

Dorsum nearly glabrous, shining, a few rather conspicuous hairs on embolium, outer margin of corium and cuneus; short, inconspicuous hairs in punctures on clavus, inner apical margin of corium, and hind margin of pronotum. Coloration yellowish brown and marked with reddish brown; clavus reddish brown, paler along apex of claval vein; corium on apical one-third reddish brown, anal ridge and extending along inner apical angle fuscous to black; apex of embolium pale yellowish; cuneus yellowish, apical one-half dark red. Scutellum yellowish brown, side margins yellow, impunctate. Membrane

uniformly dark brown, veins paler at apex of areoles. Venter and sternum dark brown to black. Legs yellow, apex of hind femora, tibiae, and apex of tarsi brown.

Female. Length 4.8 mm., width 2.2 mm. Head: width 1.06 mm., vertex .50 mm. Antennae: segment I, length .51 mm.; II, 1.17 mm.; III, .53 mm.; IV, .37 mm.; brown to fuscous. Pronotum: length .96 mm., width at base 1.78 mm. Slightly more robust than the male but very similar in coloration, pubescence, and puncturation.

Holotype: male April 18, 1931, Lyman, Miss. (H. G. Johnston); author's collection.

Allotype: taken with the type.

Paratypes: 11 males and females taken with the types on wild olive (*Osmanthus americanus*), where the species was evidently breeding.

Phytocoris tillandsiae n. sp.

This species belongs in group III of Dr. Knight's key (Hem. Conn., 1923, p. 641) but differs from other species in that group by the pale bluish-green color on pronotum and hemelytra.

Male. Length 5.0 mm., width 1.6 mm. Head: width .96 mm., vertex .21 mm.; uniformly pale yellowish green. Rostrum length 2.0 mm. reaching upon middle of venter, fuscous, first segment pale green. Antennae: segment I, length .88 mm., pale greenish yellow, indistinctly marked with irregular fuscous spots; II, 2.3 mm., yellowish to fuscous; III, 1.1 mm.; IV, .75 mm.; III and IV fuscous. Pronotum: length .75 mm., width at base 1.3 mm., pale bluish-green, darker on posterior half, paler on disk behind calli, calli and collar yellowish to fuscous, several elongate fuscous spots near posterior margin. Scutellum pale green, a vague fuscous spot each side of median line on apical half. Hemelytra bluish-green clouded with fuscous; embolium pale green with numerous irregular fuscous spots; inner margin of clavus and along commissure pale; cuneus pale green, large black spot on apical third and extending along inner margin to basal third, apex white, small black spot on inner basal angle with tuft of fuscous simple hairs; membrane and veins fuscous, veins white around apex of areoles. Simple pubescence pale on head and anterior portion of pronotum, brown on posterior half of pronotum with brown spot at base of each hair, pale yellowish to brown on scutellum and hemelytra; intermixed on dorsum with tufts of white sericeous pubescence. Sternum and venter pale green to fuscous. Coxae pale green; femora fuscous, pale at base, closely spotted with small and coalescing pale green spots, posterior aspect of hind femora largely pale green; tibiae pale green,

spines brown, apex of front and middle tibiae and tarsi fuscous; hind tibiae pale only on basal third, apical two-thirds fuscous with large pale green marks. Genital claspers similar to *pinicola* Knight but distinctive. Left clasper broader at base, longer and more slender on apical two-thirds and more abruptly curved; right clasper more slender, acuminate and broadly curved to form a distinct hook on apical third.

Female. Length 4.6 mm., width 1.7 mm. Head: width .88 mm., vertex .33 mm. Antennae: segment I, length .96 mm.; II, 2.14 mm.; III, 1.05 mm.; IV, .79 mm. Pronotum: length .79 mm., width at base 1.3 mm. Very similar to male in pubescence and coloration.

Holotype: male, April 18, 1934, Huntsville, Texas (H. G. Johnston); author's collection.

Allotype: taken with the type.

Paratypes: 7 males and females taken with the types on Spanish moss, *Tillandsia usneoides*, where the species breeds. Female, May 10, 1928, male, March 27, 1930, male, April 21, 1934, College Station, Texas, on Spanish moss (H. G. Johnston); 7 males and females, April 16, 1931, Biloxi, Mississippi; male, May 12, 1931, Columbia, Mississippi, reared from nymphs collected on Spanish moss (H. G. Johnston).

The adults of this species evidently leave Spanish moss soon after reaching maturity, since practically all the specimens taken have been teneral, and adults are scarce even when nymphs are abundant. The bluish green color is indistinct until the specimen has reached maturity.

(*Myllocerus*) *Corigetus*? *castaneus* Roelofs.—Specimens of this weevil, hitherto unreported from the United States, were taken at Montclair, N. J., in July, 1933, probably from oaks, by Mr. Alan S. Nicolay. Mr. L. L. Buchanan, of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, to whom a specimen was submitted for identification, states that it evidently does not belong in the genus *Myllocerus*, and refers it tentatively to *Corigetus*.

The beetle was first described by Roelofs in 1873 in *Annales de la Société Entomologique de Belgique*, volume 16, pages 168-169, as from Japan. No mention was there made of habits. E. Reitter, in *Deutsche Entomologische Zeitschrift*, 1900, p. 62, records it as from "Amur-Länder." Presumably this means the Amur River basin, near Vladivostok, in Primorsk. The specimen in the U. S. National Museum is from Japan.—A. C. DAVIS, Takoma Park, Md.